4.8 Hazards and Hazardous Materials

This section of the EIR describes the potential physical environmental effects related to the issue of hazards and hazardous materials resulting from development of CIP projects under the proposed Master Plans.

As discussed in Chapter 4, Environmental Analysis, the following CIP projects have been adequately addressed in previous CEQA documents and are not included in this analysis: Sewer CIP Projects SR-6, SR-10, SR-25, N-1, N-2, N-5, N-7, N-8, N-10, N-11, I-3, I-4, I-5, and I-6; Water CIP Projects 7, 8, 40, and R6; and Recycled Water CIP Projects ES3.

4.8.1 Environmental Setting

For purposes of this EIR, a "hazardous material" is defined by the California Health and Safety Code Sections 25501(n) and (o), as: "any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous wastes, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment."

4.8.1.1 Hazardous Materials Associated with Existing Sewer, Water, and Recycled Water Facilities

Existing hazards materials associated with sewer facilities include the potential for leaks or spills of raw sewage from pipelines or sewage conveyance facilities. Hazardous materials are also used for the routine operation and maintenance of existing sewer, water, and recycled water facilities, including lift stations, pump stations, and reservoirs. Common hazardous materials at existing facilities include chlorine, sodium chloride, ammonia, bioxide, ferrous chloride solution, carbon, and diesel fuel (Carlsbad 2011b). Hazardous Materials Business Plans (HMBPs) have been prepared for facilities that use hazard materials (Carlsbad 2011a). The plans are prepared in accordance with County of San Diego Department of Environmental Health (DEH), Hazardous Materials Division requirements and are submitted to the County for approval and recording. The DEH, Hazardous Materials Division is the Certified Unified Program Agency for San Diego County, and inspects businesses or facilities that handle or store hazardous materials, or generate hazardous waste. The HMBPs include an inventory of all hazardous materials and a description their properties, identification of the site operator, a map identifying the location of the hazardous materials, emergency response procedures for major and minor emergencies, an emergency response plan, and a description of required employee training.

4.8.1.2 Transportation of Hazardous Materials

The U.S. Department of Transportation, Office of Hazardous Materials Safety, sets strict regulations for the safe transportation of hazardous materials, as outlined in Title 49 of the Code of Federal Regulations. In California, the California Highway Patrol (CHP) has the primary authority of enforcing federal and state regulations and responding to hazardous materials transportation emergencies. Specifically, Section 31303 of the California Vehicle Code requires that when hazardous materials are

transported on State or interstate highways, the highway(s) that offer the shortest overall transit time possible shall be used. The transportation of hazardous materials along any city or state highway within or near the service area is subject to applicable regulations established by the CHP, the DEH and the California Department of Toxic Substances and Control.

4.8.1.3 Hazardous Materials and Hazardous Material Sites

A record search was conducted in February 2012 of federal, state, and local databases of sites that generate, store, treat, or dispose of hazardous materials, or sites for which a hazardous materials release or incident has occurred. The GeoTracker database is a geographic information system that provides online access to environmental data including underground fuel tanks, fuel pipelines, and public drinking water supplies. The EnviroStor database includes the following site types: Federal Superfund Sites (National Priorities List); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. The Site Assessment and Mitigation Program lists sites in San Diego County that require permitting for handling hazardous materials.

The GeoTracker Database identified over 250 leaking under storage tank, land disposal sites, and other cleanup sites throughout the sewer, water, and recycled water services areas. Open leaking under storage tank and cleanup sites are concentrated near McClellan-Palomar Airport, the automotive and industrial uses along Interstate 5, and the industrial area east of Rancho Santa Fe Road in San Marcos. The EnviroStor database identified eight sites within Carlsbad, including three school cleanup sites, four industrial sites, and the Cabrillo Power facility. The Site Assessment and Mitigation Program lists 783 permitted hazardous materials establishments in Carlsbad.

According the Carlsbad General Plan Master EIR (1994), approximately 75 percent of registered hazardous substances in the city are located at gas stations and auto-related businesses. This is generally consistent with the findings of the 2012 database search, although industrial uses are also a notable source of hazardous materials. Other small scale uses such as dry cleaners, medical/dental offices and veterinary clinics use and produce small quantities of hazardous materials (Dudek 2003). Utilities, such as San Diego Gas & Electric and the Encina Water Pollution Control Facility, use some hazardous materials in their operations but they do not directly manufacture or dispose of hazardous materials as their primary purpose. There are two former waste disposal facilities located in Carlsbad. The first site is adjacent to the south side of McClellan-Palomar Airport. This site was used for disposal of household waste between 1962 and 1975. No hazardous materials have been identified at the site, and it was closed and capped by the County of San Diego in accordance with Title 14 of the California Code of Regulations. The second site is located in the far northeastern corner of Carlsbad, and was also used for the burning of municipal waste. The site has not been operational since 1961 and has since been redeveloped. There are no known illegal dumps with hazardous materials within Carlsbad (Dudek 2003).

Two existing sewer facilities are currently listed as hazardous materials sites in the GeoTracker database: Buena Vista pump station and Foxes Landing lift station. The Buena Vista pump station case (#T0607301725) is a completed and closed as of November 2, 1994. The case involved potential drinking water contamination from a diesel fuel leak. The Foxes Landing lift station case (#T0608142931) is open and inactive, which means that no regulatory oversight activities are being conducted by the lead agency for the case, which is the County of San Diego. This case involves potential soil contamination from spill of oil in the waste/motor/hydraulic/lubricating oil category.

Active permitted facilities listed in the Site Assessment and Mitigation Program database include the Chinquapin sewer lift station, Faraday sewer lift station, Foxes Landing sewer lift station, Simsbury sewer lift station, Cannon Road lift station, Agua Hedionda pump station, Batiquitos sewer lift station, Knots sewer lift station, Poinsettia sewer lift station, and Sand Shell sewer lift station.

4.8.1.4 Airport Safety Hazards

McClellan-Palomar Airport is located approximately four miles southeast of the Carlsbad Village Area and is a general aviation, publicly owned airport facility. The San Diego County Regional Airport Authority (SDCRAA) acts as the Airport Land Use Commission for the San Diego region and is charged with developing airport land use compatibility plans. The SDCRAA prepared an airport land use compatibility plan for the McClellan-Palomar Airport, last amended in 2011. The purpose of the compatibility plan is to provide for the orderly growth of McClellan-Palomar Airport and the area surrounding the airport within the jurisdiction of the SDCRAA, and to safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general.

The ALUCP identifies the Airport Influence Area (AIA) for McClellan-Palomar Airport. These are areas adjacent to airports which are likely to be affected by noise from aircraft operations at the airport, or where height restrictions would be needed to prevent obstructions to navigable airspace. The AIA for McClellan-Palomar Airport generally extends west to the Pacific Ocean, north approximately 1.5 miles from the airport, east approximately two miles, and south approximately one mile. Within the larger Airport Influence Area, other operational areas, such as the Flight Activity Zone (FAZ), are also identified which reflect specific aircraft operational overflight patterns as outlined in Federal Aviation Administration regulations. The FAZ for the McClellan-Palomar Airport was determined based upon noise, flight hazards, and obstruction criteria established in Part 77 of the Federal Airport Regulations, *Objects Affecting Navigable Airspace*. The FAZ is the area where most problems from the normal flight pattern may be expected to occur. Within the FAZ, the flight activity hazard area is the area most likely to experience a crash and is the area beneath the flight pattern, especially the final approach to the runway. The airport land use compatibility plan states that the FAZ should be held free of intensive development, including all uses which involve the assembly of large groups of people.

The Oceanside Municipal Airport is located approximately 500 feet north of the proposed location of Water CIP Project 52. The Oceanside Municipal Airport features one runway and covers 43 acres. It is a public airport used primarily for general aviation. The airport land use compatibility plan for Oceanside Municipal Airport was last revised in October 2004. The AIA for Oceanside Municipal Airport extends west to Interstate 5, south to Mission Avenue, north into Marine Corps Base Camp Pendleton, and east approximately 0.5 mile. The site proposed for Water CIP Project 52 is just south of the AIA.

4.8.1.5 Wildfire Hazards

The majority of the sewer, water, and recycled water services areas are developed and designated a Non-Very High Fire Hazard Severity Zone by the California Department of Forestry and Fire Protection (CalFire 2009). However, large areas of open space areas exist throughout the service areas with potentially flammable materials such as brush, grass or trees. Areas in the Very High Fire Hazard Severity Zone include small area along the northern boundary of Carlsbad just east of Interstate 5, land surrounding Batiquitos Lagoon, several large areas along the eastern boundary of Carlsbad, portions of

Oceanside along the northeast boundary of Carlsbad, the area of Vista within the project area, and portions of the area of San Marcos within the project area.

4.8.1.6 Emergency Response and Evacuation Plans

Emergency response plans include elements to maintain continuity of government, emergency functions of governmental agencies, mobilization and application of resources, mutual aid, and public information. Emergency response plans are maintained at the federal, state and local level for all types of disasters, including human-made and natural. To address disasters and emergency situations at the local level, the Unified Disaster Council (UDC) is the governing body of the Unified San Diego County Emergency Services Organization. The UDC is chaired by a member of the San Diego County Board of Supervisors and comprised of representatives from the 18 incorporated cities.

Potential hazards or events that may trigger an emergency response action in the county include earthquakes, tsunamis, floods, wildland fires, landslides, droughts, hurricanes, tropical storms and freezes. Emergency response actions could also be triggered from a hazardous material incident, water or air pollution, a major transportation accident, water, gas, or energy shortage, an epidemic, a nuclear accident, or terrorism (County 2009).

In San Diego County, there is a comprehensive emergency plan known as the Operational Area Emergency Plan. Stand-alone emergency plans for the operational area include:

- San Diego County Nuclear Power Plant Emergency Response Plan
- San Diego County Operational Area Oil Spill Contingency Element of the Area Hazardous Materials Plan
- San Diego County Operational Area Emergency Water Contingencies Plan
- Unified San Diego County Emergency Services Organization Operational Area Energy Shortage Response Plan
- Unified San Diego County Emergency Services Organization Recovery Plan
- San Diego County Multi-Jurisdictional Hazard Mitigation Plan
- San Diego Urban Area Tactical Interoperable Communications Plan
- San Diego County Draft Terrorist Incident Emergency Response Protocol

In addition to the above plans, the County of San Diego Office of Emergency Services maintains Dam Evacuation Plans for the operational area. Emergency plans for dam evacuation are necessary to plan for the loss of life, damage to property, displacement of people, and other ensuing hazards that can occur from dam failure. In the event of dam failure, damage control and disaster relief would be required and mass evacuation of the inundation areas would be essential to save lives. Dam inundation is further discussed in Section 4.9 (Hydrology and Water Quality) of this EIR.

The San Diego County Multi-Jurisdictional Hazard Mitigation Plan was developed with the participation of all jurisdictions within San Diego County, including all incorporated cities and the County of San Diego. The plan includes an overview of the risk assessment process, identifies hazards present in the jurisdiction, hazard profiles, and vulnerability assessments. The plan also identifies goals, objectives and actions for each jurisdiction in San Diego County.

Hazards profiled in the Multi-Jurisdictional Hazard Mitigation Plan include wildfire, structure fire, flood, coastal storms, erosion, tsunami, earthquakes, liquefaction, rain-induced landslide, dam failure, hazardous materials incidents, nuclear materials release, and terrorism. The plan sets forth a variety of objectives and actions based on a set of broad goals, including 1) promoting disaster-resistant future development; 2) increased public understanding and support for effective hazard mitigation; 3) building support of local capacity and commitment to become less vulnerable to hazards; 4) enhancement of hazard mitigation coordination and communication with federal, state, local and tribal governments; and 5) reducing the possibility of damage and losses to existing assets, particularly people, critical facilities or infrastructure, and county-owned facilities due to dam failure, earthquake, coastal storm, erosion, tsunami, landslides, floods, structural fire/wildfire, and manmade hazards.

The City of Carlsbad runs an Emergency Operations Center (EOC) where emergency incident information is collected, analyzed, verified and disseminated to elected officials, city staff, area residents, businesses, schools, visitors and the media. The EOC's principal function is information and resource management to protect lives, property, the environment, and to promote public safety. The EOC coordinates resource support for fire, police, public works, and other response agencies; and coordinates general public emergency notifications, evacuations and sheltering. The EOC is only activated and staffed for large-scale emergency incidents. When activated, the EOC is staffed from various city departments and lead by the EOC Director, Carlsbad's city manager or designee. The EOC is organized in accordance with the National Incident Management and Incident Command Systems guidelines (Carlsbad 2012).

4.8.2 Regulatory Framework

Applicable federal and state laws and regulations governing the generation, handling, transportation, storage, use, and disposal of hazardous materials are described in the following sections. Federal agencies that regulate hazardous materials include the U.S. EPA and the federal Occupational Safety and Health Administration. At the state level, agencies such as the California Environmental Protection Agency, California Department of Toxic Substances and Control, California Occupational Safety and Health Administration govern the use of hazardous materials. On the local level, the DEH governs the use of hazardous materials.

4.8.2.1 Federal

Resource Conservation and Recovery Act of 1976

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act (RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984. These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of. The EPA has the primary responsibility for implementing RCRA; however, individual states are encouraged to seek authorization to implement some or all of RCRA provisions.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA), also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is then made publicly available so that interested parties

may become informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by EPA's Office of Emergency Management. EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through California Accidental Release Prevention Program (CalARP).

International Fire Code

The International Fire Code (IFC), created by the International Code Council, is the primary means for authorizing and enforcing procedures and mechanisms to ensure the safe handling and storage of any substance that may pose a threat to public health and safety. The IFC regulates the use, handling, and storage requirements for hazardous materials at fixed facilities. The IFC and the International Building Code (IBC) use a hazard classification system to determine what protective measures are required to protect fire and life safety. These measures may include construction standards, separations from property lines, and specialized equipment. To ensure that these safety measures are met, the IFC employs a permit system based on hazard classification. The IFC is updated every three years.

Hazardous Materials Transportation Act

The U.S. Department of Transportation regulates hazardous materials transportation under Title 49 of the Code of Federal Regulations. State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the CHP and Caltrans. These agencies also govern permitting for hazardous materials transportation.

4.8.2.2 State

California Health and Safety Code, Hazardous Materials Release Response Plans and Inventory

Two programs found in the California Health and Safety Code (H&SC) Chapter 6.95 are directly applicable to the CEQA issue of risk due to hazardous substance release. In San Diego County, these two programs are referred to as the HMBP Program and the CalARP program. DEH is responsible for the implementation of the HMBP program and the CalARP program in San Diego County. The HMBP and CalARP programs provide threshold quantities for regulated hazardous substances. When the indicated quantities are exceeded, a HMBP or Risk Management Plan (RMP) is required pursuant to the regulation. Congress requires the EPA Region 9 to make RMP information available to the public through the EPA's Envirofacts Data Warehouse. The Envirofacts Data Warehouse is considered the single point of access to select EPA environmental data.

Title 22 of the California Code of Regulations and Hazardous Waste Control Law, Chapter 6.5

The California Department of Toxic Substances and Control regulates the generation, transportation, treatment, storage and disposal of hazardous waste under RCRA and the California Hazardous Waste Control Law. Both laws impose "cradle to grave" regulatory systems for handling hazardous waste in a manner that protects human health and the environment. California EPA has delegated some of its authority under the Hazardous Waste Control Law to county health departments and other certified unified program agencies, including the DEH.

SB 1889, Accidental Release Prevention Law/Chemical Accident Release Prevention Program

SB 1889 required California to implement a federally mandated program governing the accidental airborne release of chemicals promulgated under Section 112 of the Clean Air Act. Effective January 1,

1997, the CalARP replaced the previous California Risk Management and Prevention Program (RMPP) and incorporated the mandatory federal requirements. CalARP addresses facilities containing specified hazardous materials ("regulated substances") that, if involved in an accidental release, could result in adverse off-site consequences. CalARP defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive.

State Fire Regulations

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which include regulations concerning building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training. The State Fire Marshal enforces these regulations and building standards in all state-owned buildings, state-occupied buildings, and state institutions throughout California.

4.8.2.3 Local

San Diego Multi-Jurisdictional Hazard Mitigation Plan

The San Diego Multi-Jurisdictional Hazard Mitigation Plan identifies the following hazards within the San Diego region along with the emergency response/evacuation plans to avoid such hazards: coastal storms/erosion/tsunami, dam failure, earthquakes, floods, rain-induced landslides, liquefaction, structure/wildland fire, and manmade hazards (hazardous materials and terrorism).

4.8.3 Project Impacts and Mitigation

4.8.3.1 Issue 1 – Transport, Use, and Disposal of Hazardous Materials and Accidental Releases

Hazards and Hazardous Materials Issue 1 Summary

Would implementation of the Sewer, Water, and Recycled Water Master Plans result in a significant hazard to the public or the environment through the transport, use or disposal of hazardous materials; through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment; or through hazardous emissions within one-quarter mile of an existing or proposed school?

Impact: Implementation of the Sewer, Water, and Recycled Water Master Plans would comply with applicable regulations, such as RCRA, EPCRA and CalARP, related to hazardous materials use and handling.	**Mitigation:** No mitigation required.
Significance Before Mitigation: Less than significant.	**Significance After Mitigation:** Impacts are less than significant without mitigation.

Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Master Plans would have a significant impact if it would create a hazard to the public or the environment through the transport, use, or disposal of hazardous materials; through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment; or through hazardous emissions within one-quarter mile of an existing or proposed school.

Impact Analysis

As discussed in Section 4.8.1.1, many of the existing City and CMWD facilities, including pump/lift stations, treatment stations, and reservoirs, require the occasional use of hazardous materials as part of maintenance of these facilities. Typical hazardous materials used include fuels, lubricants, oils, paints, and solvents. Water storage, water pump stations, and sewer facilities also use chorine and other hazardous materials for water disinfection and distribution. Fuel for landscaping is occasionally required at facilities, including access roads.

Numerous federal and state regulations require strict adherence to specific guidelines regarding the use, transportation, disposal and accidental release of hazardous materials. Regulations associated with transporting, using or disposing of hazardous materials include RCRA, which provides the 'cradle to grave' regulation of hazardous wastes; EPCRA, which requires any infrastructure at the state and local levels to plan for chemical emergencies; the IFC, which regulates the use, handling, and storage requirements for hazardous materials at fixed facilities; the Hazardous Materials Transportation Act, which governs hazardous materials transportation on U.S. roadways; California H&SC, which provides threshold quantities for regulated hazardous substances and the establishment of Hazardous Materials Release Response Plans; CCR Title 22, which regulates the generation, transportation, treatment, storage and disposal of hazardous waste; CCR Title 27, which regulates the treatment, storage and disposal of hazardous solid wastes; SB 1889, which defines regulated substances as chemicals that pose a threat to public health and safety or the environment because they are highly toxic, flammable, or explosive; and the Consolidated Fire Code, which includes permit requirements for the installation, alteration, or repair of new and existing fire protection systems, and penalties for violations of the code.

Construction activities associated with CIP projects may also generate hazardous materials and wastes. Petroleum products such as fuels and oils would be the predominant materials used during construction due to operation of motorized construction equipment and vehicles. The main hazardous wastes produced by construction activity would be waste oil and oil-saturated materials from construction equipment. Hazardous materials and waste would be managed and used in accordance with all applicable federal, state, and local laws and regulations. There would be no routine transport, storage, use, or disposal of significant amounts of hazardous materials. Minimal amounts of hazardous materials may be transported to and from a site during construction, but the transport of such materials would be temporary and subject to applicable regulations, such as the Hazardous Materials Transportation Act. Therefore, impacts associated with hazardous wastes generated from construction activities would be less than significant.

Following construction, the proposed sewer, water, and recycled water pipelines would be passive and would not require the use of hazardous materials for operation or routine maintenance. Sewer pipe rupture, or pump station failure, could result in spillage of raw sewage and exposure of the public and

the environment to health hazards. However, the City has committed to the following design features, listed in Section 2.6.2, to minimize hazards to the public:

- In order to ensure that the project does not cause a significant hazard to the public or the environment through release of or transport of hazardous materials during construction and operation, the City or its contractors, will implement the following project design features:
  - Pipelines of the project components would be constructed with polyvinyl chloride pipe, or other material, which is highly resistant to rupture.
  - Pump stations included as part of the project, and stations that will service the proposed project will be designed or constructed with safety features, including an emergency generator on site in case of electrical failure, and sufficient sewage detainment capacity in the event of generator and/or pump mechanism failure to allow time for repair and/or emergency conveyance of the sewage. Portable emergency generators may be used for pump stations that cannot be equipped with an on-site generator. Should emergency leaks or spills occur, the Sewer Prevention and Response Plan for both the City and the CMWD will be implemented.

Most of the remaining CIP projects are improvements to existing facilities that would not result in an increase in the use of hazardous materials at these sites. The materials used at the new CIP facilities, including access roads (Sewer CIP Projects SR-19, SR-22, and SR-23), pump station (Water CIP Project R14), buildings (Water CIP Project PS1), and groundwater treatment plant (Water CIP Project 52) would be similar to what is already used for existing facilities operated by the City and CMWD. Implementation of the Master Plans would result in a slight increase in the use of hazardous materials due to an increase in the number of facilities. Hazards related to these materials could occur during storage, transportation, use, disposal, or accidental release. However, City and CMWD facilities that involve the use of hazardous materials are required to prepare and implement a HMBP for long-term facility operations, similar to existing facilities. The procedures in the plan comply with U.S. Department of Transportation (Office of Hazardous Materials Safety) and CHP regulations for the transportation of hazardous materials along State highways, and are subject to approval by the DEH. As discussed in Section 4.8.1.1, these plans include employee training and emergency response plans.

The routine use, transport, or disposal of hazardous materials at CIP facilities would be managed and used as required by all applicable federal, state, and local laws and regulations, such as RCRA, Title 22, the Hazardous Waste Control Law, Hazardous Materials Transportation Act, and Hazardous Material Business Plans. Therefore, impacts associated with the use, transport, and disposal of hazardous materials generated from operational activities would be less than significant.

Compliance with applicable regulations would also minimize foreseeable risks of an accident that could create a hazard to the public or environment. Therefore, implementation of the Master Plans would not result in hazardous emissions within one-quarter mile of an existing or proposed school during operation or construction. Impacts would be less than significant.

Mitigation Measures

Impacts related to the transport, use, disposal or accidental release of hazardous materials would be less than significant. No mitigation is required.

Significance After Mitigation

Impacts related to the transport, use, disposal or accidental release of hazardous materials would be less than significant without mitigation.

4.8.3.2 Issue 2 – Listed Hazardous Materials Sites

Hazards and Hazardous Materials Issue 2 Summary

Would implementation of the Sewer, Water, and Recycled Water Master Plans result in activities located on a listed hazardous materials site creating a significant hazard to the public or environment?

Impact: A site-specific hazardous materials record search conducted prior to individual CIP project construction would prevent activities from creating a significant hazard to the public or environment.	**Mitigation:** No mitigation required.
Significance Before Mitigation: Less than significant.	**Significance After Mitigation:** Impacts are less than significant without mitigation.

Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Master Plans would have a significant impact if it would result in activities located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

Impact Analysis

The potential exists for CIP project sites to have been previously contaminated by hazardous substances as a result of former uses of the sites, leaks from unidentified underground storage tanks, or unidentified buried debris that could contain hazardous substances or hazardous by-products. Typical pathways of exposure to pollutants from existing contamination includes inhalation of volatiles and fugitive particulates, dermal absorption, and ingestion of contaminated groundwater caused by migration of chemicals through soil to an underlying potable aquifer. Potential exposure to contaminants could occur to construction workers during grading, trenching, excavation, and site development activities. Construction activities could also uncover underground storage tanks or other buried hazards. However, the CMWD and City have committed to the following project feature listed in Section 2.6.2:

- A site-specific hazardous materials record search for the locations and type of hazardous materials for the site will be done and, if required, a site assessment will be conducted during final design of individual CIP project components.

Conducting a hazardous materials database search and environmental site assessment prior to any ground-disturbing activities associated with the construction of CIP sites would identify hazardous materials that could be encountered during CIP construction activities. If potential hazards are

identified, construction would be required to comply with all applicable federal, state, and local laws related to the remediation, handling, and disposal of hazardous materials. Required compliance with existing laws would reduce this impact to a less than significant level.

Mitigation Measures

Impacts related to listed hazardous materials sites would be less than significant. No mitigation is required.

Significance After Mitigation

Impacts related to listed hazardous materials sites would be less than significant without mitigation.

4.8.3.3 Issue 3 – Emergency Response and Evacuation Plans

Hazards and Hazardous Materials Issue 3 Summary

Would implementation of the Sewer, Water, and Recycled Water Master Plans impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Impact: The Master Plans would implement a traffic control plan that would prevent interference with an adopted emergency response plan or evacuation plan.	**Mitigation:** No mitigation required.
Significance Before Mitigation: Less than significant.	**Significance After Mitigation:** Impacts are less than significant without mitigation.

Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Master Plans would have a significant impact if it would impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

Impact Analysis

Interference with an adopted emergency response or evacuation plan would result in an adverse physical effect to people or the environment by potentially increasing the loss of life and property in the event of a disaster. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan evaluates risks associated with coastal storms, erosion, and tsunami, dam failure, earthquakes, floods, rain-induced landslides, liquefaction, structure/wildfire fires and manmade hazards and provides goals, objectives and actions to reduce impacts from these hazards. Construction activities associated with the Master Plans, particularly excavation and trenching activities associated with pipeline extensions or other improvements that are within roadway right-of-ways, may result in temporary, construction-related lane and road closures or detours. Temporary roadway closures could potentially interfere with emergency plans and procedures if appropriate authorities are not properly notified, or multiple projects are constructed during the same time and multiple roadways used for emergency routes are

concurrently blocked. However, as stated in Section 2.6.2 under the Transportation/Traffic heading, the City and CMWD have committed to the following design feature:

- Prior to construction, the City will prepare a traffic control plan and coordinate with the cities of Oceanside, Vista, and San Marcos to address traffic during construction of project components within the public right-of-ways of the affected jurisdiction(s), including bicycle, pedestrian, and transit facilities. The traffic control plan will include signage and flagmen when necessary to allow the heavy equipment to utilize residential streets. The traffic control plan will also include provisions for coordinating with local school hours and emergency service providers regarding construction times.

With implementation of a traffic control plan, the Master Plans would not result in a potentially significant impact associated with impairment or interference with emergency response or evacuation plans.

Mitigation Measures

Impacts related to emergency response and evacuation plans would be less than significant. No mitigation is required.

Significance After Mitigation

Impacts related to emergency response and evacuation plans would be less than significant level without mitigation.

4.8.3.4 Issue 4 – Aircraft Hazards

Hazards and Hazardous Materials Issue 4 Summary

Would implementation of the Sewer, Water, and Recycled Water Master Plans result in a safety hazard for people residing or working within two miles of a public airport or within the vicinity of a private airstrip?

Impact: The Master Plans would not result in safety hazard related to air traffic.	**Mitigation:** No mitigation required.
Significance Before Mitigation: Less than significant.	**Significance After Mitigation:** Impacts are less than significant without mitigation.

Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Master Plans would have a significant impact if it would result in a safety hazard for people residing or working within two miles of a public airport or within the vicinity of a private airstrip.

Impact Analysis

Several project components would be located within the Palomar-McClellan Airport Influence Area and FAZ, including sewer and recycled water pipelines and improvements surrounding the airport (Sewer CIP Projects SR-3, SR-17, SR-24, and N-12, and Recycled Water CIP Projects ES1). The proposed CIP projects would construct sewer, water, and recycled water infrastructure and do not involve any construction or long-term operational features that would result in an airport safety hazard for people residing or working in the project area. No structures for human occupancy are proposed in the FAZ. Activities at Palomar-McClellan Airport would be unaffected by the proposed project. Additionally, none of the proposed CIP projects are within the AIA for Oceanside Municipal Airport. Impacts would be less than significant.

Mitigation Measures

Impacts related to airport hazards would be less than significant. No mitigation is required.

Significant After Mitigation

Impacts related to airport hazards would be less than significant without mitigation.

4.8.3.5 Issue 5 – Wildland Fires

Hazards and Hazardous Materials Issue 5 Summary

Would implementation of the Sewer, Water, and Recycled Water Master Plans expose CIP structures or people to a significant risk of loss involving wildland fires?

Impact: The Master Plans would not expose structures or people to a significant loss involving wildland fires.	**Mitigation:** No mitigation required.
Significance Before Mitigation: Less than significant.	**Significance After Mitigation:** Impacts are less than significant without mitigation.

Standards of Significance

Based on Appendix G of the CEQA Guidelines, implementation of the Master Plans would have a significant impact if it would expose CIP structures or people to a significant risk of loss involving wildland fires.

Impact Analysis

The sewer, water, and recycled water service areas are mostly urbanized; however, portions of the City and CMWD service areas are located in areas classified as Very High Fire Hazard Severity Zones, particularly in the eastern area of the service areas (CalFire 2009).

Construction and design of all Sewer, Water, and Recycled Water Master Plan CIP projects would comply with the Uniform Fire Code (Title 24 CFR, Part 9), which requires installation of sprinkler systems, fire-resistant building materials, standard roadway access widths, and other features to ensure that all above-ground structures are constructed with all reasonable fire safety features. Additionally, the City and CMWD have committed to the following design features, listed in Section 2.6.2:

- Fire safety information will be disseminated to construction crews during regular safety meetings. Fire management techniques will be applied during project construction as deemed necessary by the lead agency and depending on-site vegetation and vegetation of surrounding areas.
- A brush management plan will be incorporated during project construction by the City, CMWD, or a contractor, as necessary. Construction within areas of dense foliage during dry conditions will be avoided, when feasible.
- In cases where avoidance is not feasible, necessary brush fire prevention and management practices will be incorporated. Specifics of the brush management program will be determined as site plans for the project are finalized.

Preparation of a brush management plan and dissemination of fire safety information to construction crews would help to ensure impacts would not be significant. As such, the project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Mitigation Measures

Impacts related to wildland fires would be less than significant. No mitigation is required.

Significance After Mitigation

Impacts related to wildland fires would be less than significant without mitigation.

4.8.4 Cumulative Impacts

Hazards and Hazardous Materials Cumulative Issue Summary

Would implementation of the Sewer, Water, and Recycled Water Master Plans have a cumulatively considerable contribution to a cumulative public safety impact considering past, present, and probable future projects?

Cumulative Impact	Significant?	Project Contribution
Transport, use, and disposal of hazardous materials and accidental releases into the environment and near schools.	No	Not cumulatively considerable.
Listed Hazardous Materials Sites.	No	Not cumulatively considerable.
Emergency Response and Evacuation Plans.	Yes	Not cumulatively considerable.
Aircraft Hazards.	No	Not cumulatively considerable.
Increased exposure to wildland fire hazards.	Yes	Not cumulatively considerable.

4.8.4.1 Transport, Use, and Disposal of Hazardous Materials and Accidental Releases

The geographic context for the analysis of cumulative impacts relative to the transport, use and disposal of hazardous materials, and associated accidental releases, encompasses the roadways and freeways used by vehicles transporting hazardous materials to and from the CIP construction sites, and the CIP project sites that involve the use of hazardous materials. Construction and operation activities associated with many of the cumulative projects could also involve the transport, use and disposal of hazardous materials, and associated accidental releases along the circulation system within the service area. However, similar to the proposed CIP projects, the cumulative projects would be required to comply with applicable federal, state, and local regulations related to the transportation, storage, use, and disposal of hazardous materials. In addition, facilities would be required to implement a HMBP to allow for the transportation, storage, use, and disposal of hazardous materials if hazardous materials would be used in operations. Additionally, the City and CMWD would require a database search of hazardous materials sites pursuant to Government Code Section 65962.5 and, if necessary, a site assessment prior to construction of a CIP project. Therefore, the construction and operation of CIP projects under the Master Plans, in combination with the cumulative projects, would not result in a significant cumulative impact related to the transport, use, and disposal of hazardous materials and accidental releases.

4.8.4.2 Listed Hazardous Materials Sites

Impacts related to listed hazardous materials sites are generally specific and limited to the area directly adjacent to the hazardous materials site. The location of one project on or near a listed hazardous materials site would not increase potential hazard impacts at another site. Therefore, the construction and operation of CIP projects under the Master Plans, in combination with the cumulative projects, would not result in a significant cumulative impact related to listed hazardous materials sites.

4.8.4.3 Emergency Response and Evacuation Plans

The geographic context for the analysis of cumulative impacts relative to emergency response and evacuation plans is the sewer, water, and recycled water service areas. Cumulative development would have the potential to result in a cumulative impact related to emergency response and evacuation plans if construction or operation of cumulative development would impair emergency access routes for other development. Following construction, projects would generally be required to demonstrate that adequate emergency access is provided or maintained in order to obtain project approval. However, similar to the proposed project, construction throughout the service areas would have the potential to result in temporary, construction-related lane and road closures or detours. A temporary potentially significant cumulative impact would occur. With implementation of a traffic control plan, the Master Plans would not impair or interfere with emergency response or evacuation plans and would not result in a cumulatively considerable contribution to this cumulative impact.

4.8.4.4 Aircraft Hazards

Impacts related to aircraft hazards are generally site specific and limited to the area within two miles of a specific airport. Location of one project within the AIA of an airport would not increase potential aircraft hazards at another site. Therefore, the construction and operation of CIP projects under the

Master Plans, in combination with the cumulative projects, would not result in a significant cumulative impact related to airport hazards.

4.8.4.5 Wildland Fires

The geographic context for the analysis of cumulative impacts relative to wildland fires is the sewer, water, and recycled water service areas. Cumulative development in the area would result in additional wildland/urban interfaces that would potentially result in additional exposure of people or structures to wildland fire risks. Therefore, the baseline cumulative impact related to wildland fires is significant. However, implementation of the proposed Master Plans would construct or upgrade sewer, water, and recycled water facilities only; none of the CIP projects would place structures for human occupancy in a high fire hazard area. Additionally, the CMWD and City would prepare a brush management plan and disseminate fire safety information to construction crews would help to ensure the construction of the CIP Project would not increase the risk of wildland fire occurrence. Implementation of the proposed project would not result in a cumulatively considerable contribution to a potentially significant cumulative impact.

4.8.5 References

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